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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/840,084	04/24/2001	Kyu-Hwang Chung	P56366	2169

7590

04/23/2003

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EXAMINER

DUONG, THOI V

ART UNIT

PAPER NUMBER

2871

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/840,084

Applicant(s)

CHUNG, KYU-HWANG

Examiner

Thoi V Duong

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 April 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 ~~is/are~~ are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 ~~is/are~~ are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Prior Art (Fig. 1) in view of Hansell, III et al. (USPN 5,176,538).

As shown in Fig. 1, Applicant's Prior Art discloses a flat panel displaying apparatus, comprising (see Specification, pages 6 and 7, paragraphs 23-27):

a liquid crystal display module 117 displaying a picture;

a chassis 119 surrounding edges of said liquid crystal display module, defining an external appearance of said flat panel displaying apparatus;

a printed circuit board 125 provided with a connector 127 connected to an external system by a connection cable 151, said printed circuit board being grounded to said chassis by screws 137;

a liquid crystal display controller 129 provided in said printed circuit board, said liquid crystal display controller activating said liquid crystal display module;

and

ground portions 135 formed around said liquid crystal display controller.

Although it has not been shown in Fig. 1, some of the ground portions 135 formed adjacent to signal lines 133 on the respective substrates are interconnected through holes and connected to the chassis by screws 137.

Applicant's Prior Art discloses a flat panel displaying apparatus that is basically the same as that recited in claim 1 except for a reinforcement connector connected to said ground portion and supporting the ground of said printed circuit board. As shown in Figs. 1-3, Hansell discloses a cable connector module having a reinforcement connector comprising

- a connector body 2 formed with a housing portion 3 receiving a connection cable 10;

- a cover (top of the body 2) provided in said connector body, opening and closing said housing portion, to fasten said connection cable in said housing portion; and

- a ground contact 6 provided in said housing portion of said connector body, said ground contact connected to said connection cable via a ground connector 13, and a ground pin 17 via a spring ground finger 8.

Hansell teaches that the spring ground finger is mechanically stressed prior to ground pin insertion thus enabling it to achieve a high normal force and ensuring reliability and environmental stability when engaged (col. 3, lines 40-45).

Fig. 1 also shows a second reinforcement connector connected to the connection cable. Accordingly, a plurality of reinforcement connectors can be

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used for grounding and receiving data signals from the external system to the printed circuit board.

With respect to claims 17-20, according to the structure of the cable connector module of Hansell, the top cover of the housing 2 is to be lifted for inserting the connection cable 10 having a ground pin 17 then to be closed for engaging a ground contact of the reinforcement connector with the ground pin.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the flat panel display apparatus of Applicant's Prior Art of with the teaching of Hansell by employed a reinforcement connector connected to the ground portion and supporting the ground of the printed circuit board for enabling to achieve a high normal force and ensuring reliability and environmental stability when engaged with the connection cable.

### ***Conclusion***

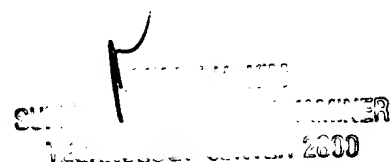
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thoi V. Duong whose telephone number is (703) 308-3171. The examiner can normally be reached on Monday-Friday from 8:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim, can be reached at (703) 305-3492.

Thoi Duong



04/17/2003



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